



General Assembly

Distr.
GENERAL

A/CONF.151/PC/35
31 January 1991

Original: ENGLISH

PREPARATORY COMMITTEE FOR THE UNITED NATIONS
CONFERENCE ON ENVIRONMENT AND DEVELOPMENT
Second Session
Geneva 18 March - 5 April 1991
Working Group II
Item 3 (b) of the provisional agenda

ENVIRONMENTALLY SOUND MANAGEMENT OF WASTES, PARTICULARLY HAZARDOUS WASTES, AND
OF TOXIC CHEMICALS, AS WELL AS PREVENTION OF ILLEGAL INTERNATIONAL TRAFFIC IN
TOXIC AND DANGEROUS PRODUCTS AND WASTES:

ENVIRONMENTALLY SOUND MANAGEMENT OF TOXIC CHEMICALS

Progress Report of the Secretary-General of the Conference

I. INTRODUCTION

1. The Preparatory Committee requested the Secretary-General of the Conference, drawing in particular upon views expressed at the meeting of its First Session and upon the expertise available in the United Nations Environment Programme and all other relevant bodies, and taking into account all relevant paragraphs of General Assembly resolution 44/228, to prepare a progress report covering a comprehensive range of areas that would provide the policy components for an integrated strategy for the environmentally sound management of toxic chemicals. The report should also

include a review of the status of the London Guidelines for the Exchange of Information on Chemicals in International Trade and the International Code of Conduct on the Distribution and Use of Pesticides, and the measures that could be considered for strengthening and supplementing them¹.

2. This report highlights major concepts and principles for the environmentally sound management of toxic chemicals; outlines some of the main international activities; and proposes policy elements that could be considered in an international strategy at the Third Substantive Meeting of the Preparatory Committee in August 1991.

3. There is a close connection between the policies and strategies for environmentally sound management of toxic chemicals and wastes, particularly hazardous wastes. Minimizing the use of chemicals that have toxic properties, coupled with the efficient use, careful handling, storage and transportation, will also result in less generation of hazardous wastes.

4. However, there is a fundamental difference which needs to be recognized. Chemicals are substances that are developed and manufactured for specific uses and applications. Some of these include their intentional release into the environment, for example for public health protection, pest control, and increasing agricultural yields. All manufactured chemicals have potential uses and intrinsic value. It is the misuse and lack of appropriate control measures that cause detrimental impacts on the environment and human health. Hence, chemicals play a crucial role in many, if not all developmental activities.

5. Wastes however, are by-products resulting from inefficient and/or incomplete reaction/production processes when raw materials are manufactured into finished goods. There is no specific intention to manufacture a waste. Substances that do not have an economic use or value become waste.

¹ Report of the Preparatory Committee for the United Nations Conference on Environment and Development, official records of the General Assembly, A/45/46 Decision 1/22/II: "Environmentally Sound Management of Toxic Chemicals".

6. In preparing this Report, very valuable cooperation and documentation were received from relevant organizations, including the United Nations Environment Programme's International Register of Potentially Toxic Chemicals, the World Health Organization, the International Labour Organization, and the Organization for Economic Cooperation and Development, and in particular the WHO/ILO/UNEP International Programme on Chemical Safety. IPCS through WHO convened a meeting of senior experts to help develop components for an integrated strategy. The Secretary-General of the Conference also benefitted from the advice and assistance provided by members of the Informal *ad hoc* Working Party on Chemicals.

II. REVIEW OF CURRENT ACTIVITIES

7. Governments, as well as industry and various professional bodies, have responded to the need to manage chemicals by establishing a variety of control programmes. There are also international programmes (such as through the Organization for Economic Cooperation and Development and the European Economic Community), and activities of groups of countries (such as the Nordic countries) dealing with management of chemicals.

8. There are some five major types of programme in the UN system and elsewhere:

- (i) Those dealing with one aspect of the management of chemicals, such as the assessment of carcinogenic risk by IARC, and the development of recommendations by the UN Committee of Experts on the Transport of Dangerous Goods.
- (ii) Those dealing with chemicals that are pollutants in environmental media or contaminants in consumer goods, including food, e.g. the development and promotion by the IMO of marine pollution control conventions, and the Codex Alimentarius Commission.
- (iii) Those dealing with several aspects of management of specific chemicals or groups of chemicals, e.g. FAO Code of Conduct on the Distribution and Use of Pesticides.
- (iv) Those dealing with many aspects of the management of the full range chemicals, the two main programmes at the international level being the cooperative venture of ILO/UNEP/WHO in the IPCS, and the OECD Special Programme for the Control of Chemicals.

- (v) Those dealing with cross-cutting activities concerned with technical cooperation and information dissemination, e.g. the International Register of Potentially Toxic Chemicals (IRPTC) of UNEP, and the training activities of the UN Specialized Agencies.

9. The exchange of information is a very important aspect in the environmentally sound management of chemicals and measure to strengthen existing mechanisms are reviewed below.

Measures to Strengthen London Guidelines and International Code of Conduct on the Distribution and Use of Pesticides (1/22.(II)a,b)

10. The Amended London Guidelines for the Exchange of Information on Chemicals in International Trade have been designed to assist Governments in the process of increasing chemical safety through the exchange of information on chemicals in international trade. The Guidelines give general provisions for enhancing the sound management of chemicals through the exchange of scientific, technical, economic and legal information and provide specific guidance on those chemicals which have been banned and severely restricted. One important element within the Guidelines is the prior informed consent (PIC) procedure. This procedure allows Governments to concentrate on concrete management activities for the exchange of information on banned and severely restricted chemicals. By making use of PIC, Governments will have a better opportunity to establish their priorities towards the safe management of chemicals in general and to eventually implement the London Guidelines to their full extent.

11. By its decision 15/30 of 25 May 1989, the Governing Council of UNEP requested the Executive Director to re-convene the *ad-hoc* Working Group of Experts on Prior Informed Consent and other Modalities to Supplement the London Guidelines for the Exchange of Information on Chemicals in International Trade with a view to:

- (i) Monitoring the implementation of the amended London Guidelines with particular attention to the prior informed consent procedure and technical assistance;
- (ii) Reviewing other activities related to the production and use of chemicals in States, and the activities of selected international organizations;
- (iii) On the basis of such monitoring and review, preparing a report on any further steps that should be taken to supplement the amended London Guidelines, including the possible further need for a convention, for submissions to the Governing Council at its sixteenth session.

12. Pursuant to Governing Council decision 15/30, UNEP convened, in Geneva in April 1990, an informal consultative meeting of experts to discuss matters related to the implementation of the amended London Guidelines.

13. The meeting also discussed the possible further development of the London Guidelines into a legally binding agreement. The experts felt that experience with the implementation of the PIC procedure was too limited at this stage and that it therefore was possibly premature to already recommend the further development of the London Guidelines into such an agreement. They stated that all options should still be kept open to allow for looking into this matter more deeply before making any recommendations to the *ad-hoc* Working Group.

14. At the First Meeting of the *ad-hoc* Working Group of Experts on the Implementation of the London Guidelines, convened by UNEP in Nairobi from 15-19 October 1990, the meeting recommended to further strengthen collaborations between UNEP, FAO, ILO, WHO, GATT, OECD and CEC in order to:

- harmonize activities relating to the implementation of the London Guidelines and the initiation of the PIC procedures, and to develop and deliver (UNEP/FAO/WHO and IRPTC) the PIC Decision Guidance documents to Governments and industry,
- continue to provide the updated version of the consolidated list of procedures, which have been banned, withdrawn, restricted and/or not approved to everybody concerned including to the industry.
- provide technical assistance for the implementation of the Amended London Guidelines,
- invite and request, as relevant, governments, industry, NGOs, UN and other organizations, to participate in, contribute to and support *inter alia*,
 - (i) the International Code of Conduct on the Distribution and Use of Pesticides,
 - (ii) the OECD Recommendation concerning information exchange related to export of banned and severely restricted chemicals (OECD countries), the regulations concerning export from and import into the EEC Community of certain dangerous chemicals (EEC countries),
 - (iii) international policies, laws and regulations for the safe management of toxic chemicals and particularly the PIC procedures,

(iv) ongoing GATT activities through the Working Group on domestically prohibited goods,

(v) initiatives of IPCS (WHO, UNEP, ILO) on the establishment of an intergovernmental mechanism of integration and harmonization of risk assessment and management of chemicals.

The International Code of Conduct on the Distribution and Use of Pesticides

15. The FAO has maintained a substantial programme on agrochemicals since its inception in 1946, providing assistance to its member countries on their safe and efficient use. Guiding principles, policies and procedures are covered in the International Code of Conduct on the Distribution and Use of Pesticides which was adopted unanimously by member governments, the pesticide industry and international and environmental organizations in 1985. The Code identifies hazards through the entire life cycle of a pesticide, assigns responsibilities to governments, the industry, distributors and users of agrochemicals, designed to safeguard against such hazards. The Code is supported by a comprehensive set of technical guidelines which provide the means of implementing particular provisions of the Code.

16. A major revision of the Code approved by member countries in 1989 incorporated Prior Informed Consent (PIC) procedures in its article on information exchanges. These procedures cover agrochemicals and are compatible with similar provisions in UNEP's London Guidelines on chemicals.

17. A global programme has been agreed between FAO and UNEP to operate PIC with FAO being mainly responsible for agrochemicals and UNEP dealing with industrial and consumer chemicals. This joint programme is already operational and consists of the following main actions:

- Designations of National Authorities by governments with the authority to make PIC decisions;
- Development of a joint data base for information on banned and severely restricted pesticides for health and/or environmental reasons;
- Preparation of a list of pesticides to be included in the initial stages of PIC implementation;
- Preparation of Decision Guidance Documents to assist developing countries in evaluating bans or restrictions by other countries.

The programme includes:

- Inventories of actions by member countries to ban or severely restrict pesticides;
- Updating and operating the joint FAO/UNEP data base;
- Preparation of guidelines for governments explaining the operation of the joint PIC procedures and providing explanations for the kinds of actions to be reported under the definitions of banned and severely restricted for health and/or environmental reasons;
- Organization of national and regional workshops to train chemical personnel from developing countries to assess chemical risks and safety,

18. Large scale, regional or sub-regional, as well as national technical assistance projects are in operation in Asia and the Pacific, in Latin America and in Africa, designed to provide advice and support in establishing legislation and control schemes for pesticides, including enactment of enforceable legislation. Assistance is also given to improve or strengthen national capabilities to comply with other important provisions of the Code.

19. The FAO has published 18 technical guidelines related to the Code and another 10 guidelines are currently under development. FAO and UNEP are organizing workshops to help countries implement the amended London Guidelines and the Code of Conduct.

The International Labour Organization

20. The ILO's contribution to safety in the use of chemicals at work comprises standards setting: dissemination of practical information and technical cooperation activities for developing countries. The ILO's Convention (No. 170) and Recommendation (No. 177) on safety in the use of chemicals at work adopted by the 1990 International Labour Conference, provide a universal basis for national and enterprise level action.

21. The 1989 International Labour Conference adopted a Resolution on the Harmonization of Systems of Classification and Labelling for the Use of Hazardous Chemicals at Work with a view to assist member States in establishing a national system for chemical safety, a longer term programme is being proposed to harmonize different existing national and international systems. The process of harmonization has already started with initial contacts to major national and international organizations dealing with this question.

22. A new code of practice on the prevention of major industrial disasters was adopted recently and will be published early 1991. The item on the prevention of industrial disasters was also included in the 1992 International Labour Conference

agenda. It is envisaged that a new international instrument on the prevention of industrial disasters would be adopted in 1993.

23. For information exchange, the ILO's International Occupational Safety and Health Information Centre (CIS) makes available to users comprehensive computerized data bases in safety and health. Training programmes on chemical safety have been developed in connection with a number of technical cooperation projects in developing countries.

Organization for Economic Cooperation and Development

24. The OECD programme of work on chemicals began in 1971 and has provided tools for Member Countries to deal with chemical management issues at the national level as well as provided a forum for concerted action leading to widely accepted control measures.

In 1978, OECD expanded its work in this field and created a special programme on the control of chemicals under a Management Committee reporting to the Council. This programme was started in order to develop internationally harmonized policies and technical instruments needed to support broadly-based approaches to chemical control.

The activities of OECD related to the environmentally sound management of chemicals include:

- the development of guidelines for testing of chemicals,
- principles of good laboratory practice (GLP),
- the OECD minimum pre-marketing set of data,
- the mutual acceptance of data,
- a systematic investigation of existing chemicals,
- recommendations concerning the exchange of information on chemicals; and
- a number of activities on chemical risk management.

III. COMPONENTS OF AN INTERNATIONAL STRATEGY FOR ENVIRONMENTALLY SOUND MANAGEMENT OF CHEMICALS

Principles of Environmentally Sound Management of Toxic Chemicals

25. The use of chemicals and of chemical processes is an essential element of the development process, and in the promotion of human well-being. They are extensively used by all societies, irrespective of their stage of development. The benefits of chemicals are inestimable. However, they can result in adverse effects on human health, and can have harmful consequences for the environment. Some 100,000 chemicals are currently marketed worldwide. The nature, number and volume of chemicals being produced and used are growing.

26. Exposure to potentially toxic chemicals may occur during their production, distribution, use, or final disposal. There are various pathways of exposure to potentially toxic chemicals; air, water, food, use of other consumer products, and occupational and domestic activities. Many chemicals and processes have not been adequately tested for their effects on health and the environment.

27. The quantity and complexity of hazardous chemical waste produce many problems and serious situations already exist due to improper disposal of such wastes. The major problems posed by exposure to chemicals and the use of chemical processes may be summarized as follows:

- deficiencies in assessing and predicting health risks and defining acceptable levels of exposure;
- inadequate national prevention and management of health and environmental problems;
- uncoordinated duplication of work at international and national levels;
- difficulties in identifying the sources of information on available models or experience (intergovernmental and non-governmental organizations, government or industry).

28. More specific problems concerning the use of chemicals in developing countries, though not necessarily exclusive to them, include, *inter alia*,

- Inadequate access to information and on capacities to assess the potential toxicity of chemicals. Lack of facilities to control the nature and purity of imported or domestically produced chemicals.
- Extensive use of chemicals by inadequately informed or trained operatives in small scale enterprises, and similar problems of exposure arising in domestic households.
- A lack of full awareness of the health and environmental problems associated with toxic chemicals, chemical processes and usage of chemicals.
- Differences in scientific, technical and managerial knowledge concerning the technology transfer, storage, transportation, use, or disposal of chemicals, and lack of resources to establish properly coordinated infrastructures, controls, and procedures.
- Deficiencies in governmental administrative or scientific structures to properly advise on the control and use of chemicals coupled with inadequate internationally harmonized labelling of chemicals and user information.

- Inadequacy of regulations concerning chemicals.
- Lack of resources to deal properly with matters of chemical safety.
- Shortage of trained personnel, and a lack of research directed specifically to national or local problems.
- Problems associated with the substitution of newer and less persistent or toxic chemicals requiring changes in technology and knowledge.

29. Essential for tackling these objectives will be the provision of adequate scientific information presented and disseminated in a readily understandable form at the international, national, local, and user levels. It will be important, therefore that the 1992 UN Conference on the Environment and Development address these problems, in light of what is already being done, in order to facilitate the most effective use of existing and new chemicals and to manage their use in ways which achieve maximum benefits with minimum risks to health and the environment.

30. There are important principles that are implicit in the elaboration of a sound strategy, to promote environmentally sound management of toxic chemicals, which the Preparatory Committee may wish to consider. These include:

- (i) The right to know and the right to be informed; information on use of chemicals and their hazards should be made available to governments, workers and the public.
- (ii) Risk reduction - minimizing, or phasing-out the use of hazardous chemicals and developing environmentally-safe process and products in accordance with the precautionary principles.
- (iii) Provision of comprehensive, and readily-useable, information on all aspects of the safety, health, and environmental effects of chemicals, with special emphasis on the needs of developing countries.
- (iv) Improved international cooperation and coordination within the UN system and with other international bodies on all aspects of risk assessment and management of chemicals, with reference to safety, environment and health.

Potential Areas for Action

31. In order to provide guidance to the secretariat, the Preparatory Committee may wish to consider the following activities for the Environmentally Sound Management of Chemicals:

- (i) Strengthening the capabilities of Member States, especially developing countries, for management of chemicals through improved legislative systems, infrastructure, education, training, monitoring, assessment, and technical cooperation.
- (ii) Strengthening and coordination of the assessment of the health and environmental risks posed by chemicals. This would require development of principles, guidelines, criteria for assessment and decision-making standards, and acceptable limits for chemicals.
- (iii) Developing sound principles of risk management for chemicals during production, transportation, storage, use, and disposal, and assisting developing countries in their risk management, particularly for pesticides.
- (iv) Developing and strengthening mechanisms for accident prevention and emergency response, including the medical aspects, at the local, national, and international levels.
- (v) Establishment of priorities for chemicals of global concern need to be evaluated, or re-evaluated.
- (vi) Provision of regulatory guidance, including monitoring and enforcement, to achieve effective control of chemical risks at national level.
- (vii) International availability of data on the amounts of chemicals produced, traded and registered. This should include notification procedures for new chemicals.
- (viii) Provision of appropriate labelling which should, as far as is appropriate, be harmonized internationally.
- (ix) Fostering technology exchange, with reference to chemical safety, so that all Member States are fully conversant with each other's decision-making concerning chemicals.
- (x) Promoting scientific research to improve the available methods for assessing chemicals, and the procedures for using test and epidemiological data to predict the effects of chemicals on human health and on the environment. Particular attention should be paid to vulnerable groups such as children, pregnant women, the elderly, the undernourished, etc.
- (xi) Ensuring that industry's responsibilities in managing chemicals are fully carried out by making available adequate assessment and safety data, and implementing such principles as product stewardship and responsible care.

32. The implementation of these activities should also take into account the critical linkages between such sound management and protection of the global environment and the natural and human resources contained therein; e.g. land, marine and fresh water, air, climate, biodiversity and living and working conditions.

33. In order to achieve the sound and effective management of the health and environmental effects of chemicals in conformity with the above principles and activities, the Preparatory Committee may wish to consider effective means for global coordination and implementation. Such coordination could include the establishment of an effective mechanism that involve Member States, with the participation of NGOs. Such a mechanism could build on existing programmes, such as the IPCS, suitably strengthened and expanded, and could also widen the applicability of activities undertaken by groups of countries, such as the OECD.

- - - - -